

CLAIMS

We claim:

1. A system for unifying data relating to an industry having a plurality of industry business context dimensions which define logical groupings of data related to the industry, the system comprising:

a plurality of data sources,

at least one data source having a physical or logical structure differing from at least one other data source, each data source having data which is capable of a logical contextual grouping into at least one data source specific dimension which contains data related to at least one industry business context dimension, and each data source having a data access mechanism for facilitating querying thereof;

a database having a first and a second plurality of nodes,

each of the first plurality of nodes representing an industry business context dimension, each of the second plurality of nodes representing a data source specific dimension of at least one of the data sources, each of the first plurality of nodes related to at least one other of the first plurality of nodes, and each of the second plurality of nodes related to at least one of the first plurality of nodes; and

a plurality of data source query function calls,

each query function call querying a single data source regarding a single data source specific dimension, and each query function call using the data access mechanism of the single data source to facilitate access to the single data source.

2. The system of claim 1 wherein each dimension has at least one dimension instance and wherein at least two of the data sources each has a physical or logical structure different from the other and each of the at least two data sources has data relating to a dimension instance, the system further comprising:

at least one complex query, the complex query comprising a plurality of data source query function calls, the complex query querying the at least two data sources for data relating to the dimension instance, the complex query calling the plurality of data source query function calls to perform the querying of the at least two data sources for the data relating to the

dimension instance, and wherein the data relating to the dimension instance is retrieved from each of the at least two data sources.

3. The system of claim 1 wherein each dimension has at least one dimension instance, the system further comprising:

at least one result set object populated by data returned from a query from a user, wherein the query from the user includes selection of at least one dimension instance and at least one query function call without identification by the user of which data source to query.

4. The system of claim 1, further comprising:

at least one complex query calling a plurality of query function calls to query the plurality of data sources, wherein the one complex query does not identify any data source to query.

5. The system of claim 1, further comprising:

at least one complex query for data located in a plurality of data sources, the complex query calling a plurality of query function calls to query the plurality of data sources for the data, the complex query having a set of input parameters which define the data to be queried for, the set of input parameters consisting of at least one dimension instance, a query result and a description of the data to be queried.

6. The system of claim 5 wherein the description of the data to be queried is an exact_request_for_information.

7. A system for managing data relating to an industry having a plurality of industry business context dimensions which define logical groupings of data related to the industry, the data contained in a plurality of data sources, at least one data source having a physical or logical structure differing from at least one other data source, each data source having data which is capable of a logical contextual grouping into at least one data source specific dimension which contains data related to at least one industry business context dimension, and each data source having a data access mechanism for facilitating querying thereof, the system comprising:

a UniDimNet and a plurality of UniViews.

8. The system of claim 7, wherein the UniDimNet further comprises:

a plurality of UniDims, each UniDim representing an industry business context dimension, each UniDim related to at least one other UniDim; and

a plurality of DataSourceDims, each DataSourceDim representing a data source specific dimension of a data source, and each DataSourceDim related to at least one UniDim.

9. The system of claim 8, wherein each UniDim and each DataSourceDim is a node in a network which is contained in a database.

10. The system of claim 9, wherein each node is a table.

11. The system of claim 9, wherein each dimension has at least one dimension instance, and each dimension instance has a unique identification, wherein:

each UniDim table contains the unique identification of each dimension instance of the dimension to which the UniDim relates.

12. The system of claim 7, wherein each UniView is a query function call which queries a single data source regarding a single data source specific dimension by using the data access mechanism of the data source.

13. The system of claim 12, further comprising at least one complex query.

14. The system of claim 13, the complex query having a set of input parameters, the set of input parameters not identifying a data source.

15. The system of claim 7 further comprising a UniViewer.

16. A method for managing data relating to an industry having a plurality of industry business context dimensions which define logical groupings of data related to the industry, the data contained in a plurality of data sources, at least one data source having a physical or logical structure differing from at least one other data source, each data source having data which is capable of a logical contextual grouping into at least one data source specific dimension which contains data related to at least one industry business context dimension, and each data source having a data access mechanism for facilitating querying thereof, the method comprising the steps of:

identifying a plurality of industry business context dimensions;

identifying at least one data source specific dimension for each data source;

providing a UniDimNet;

providing a plurality of UniViews;

formulating a complex query, the complex query using the UniDimNet to assist in calling at least one UniView to query at least one data source; and

providing the results of the query to a user.

17. The method of claim 16, the providing a UniDimNet step further comprising the steps of:

creating a UniDim for each industry business context dimension and relating each UniDim to at least one other UniDim.

18. The method of claim 17, the providing a UniDimNet step further comprising the steps of:
creating a DataSourceDim for each data source specific dimension of each data source and relating each DataSourceDim to at least one UniDim.

19. The method of claim 18 wherein each dimension has at least one dimension instance, the providing a UniDimNet step further comprising the steps of:

populating each UniDim and each DataSourceDim in the UniDimNet with data relating to each dimension instance.

20. A method for querying data relating to an industry having a plurality of industry business context dimensions which define logical groupings of data related to the industry, the data contained in a plurality of data sources, at least one data source having a physical or logical structure differing from at least one other data source, each data source having data which is capable of a logical contextual grouping into at least one data source specific dimension which contains data related to at least one industry business context dimension, each data source having a data access mechanism for facilitating querying thereof, the data sources being part of a system for unifying the data, the system having a plurality of data source query function calls, each query function call querying a single data source regarding a single data source specific dimension, each dimension having at least one dimension instance, the method comprising the steps of:

receiving from a user the identity of a dimension to be queried;

providing to the user a plurality of data source query function calls from which the user may select at least one data source query function call;

creating a result set having columns defined by the data source query functions selected by the user;

receiving from a user the identity of at least one dimension instance to perform a query regarding; and

populating the columns of the result set with data retrieved from the query.

21. The method of claim 20, further comprising the step of:

providing to the user a list of dimension instances available for the selected dimension.

22. The method of claim 20, further comprising the step of:

modifying the result field based upon a change by the user to data source query function calls selected.

23. The method of claim 20, further comprising the step of:

modifying the result field based upon a change by the user to the dimension instances selected.